

IBOS (INPUT BRAIN OUTPUT SOUND) IN THE SEARCH OF THE KILLER BRAIN-CONTROLLED MUSICAL INSTRUMENT

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ABSTRACT

Translating brainwaves into sound has been of interest since the first experiments of recording EEG data. Almost one hundred years later, there has been many developments and application of the sonification of brainwaves, but the development of a convincing EEG musical instrument yet to be seen. This paper presents a reflection brought out by the practical observations we have encountered both as researchers and performing artists regarding the use of consumer-level brain-controlled musical interfaces (BCMI) musical improvisation and performance

Frustrations with the practical constrains of consumer-level devices encouraged us to investigate further methodologies to unveil the patterns of brainwave signals. We have proposed iBoS as a developing artistic and conceptual framework that encourages the assessment of various types of brainwave sonification. We explored different wearables, sonification methodologies and artistic outcomes such as sound installations, musical compositions and improvisations, among others.

